Castlemaine Naturalist

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Monthly newsletter of the Castlemaine Field Naturalists Club Inc.

Black fronted Dotterel, Bells Swamp (January)
Photo – Noel Young

Annual Challenge Count – 1-2 December 2012

By Chris Timewell

On the first weekend in December (2012), Castlemaine was one of 35 teams nationwide to undertake the annual Challenge Count for birds. For country areas, the objective is to count as many birds as possible within 40 km of a central point. For a bird observation to be recorded, it either had to be seen by at least two people, or heard by at least 3 people. Graeme Hoskin has been coordinating the event on behalf of the Bird Observers Club of Australia for many years, and this was the first year is has been conducted as part of the merged BirdLife Australia organisation.

The Castlemaine Field Naturalists Club has had a team in the event each year for more than 10 years. Chris Morris once again coordinated the event for the CFNC, and this year Connecting Country was also able to provide some additional observers to join the CFNC. The local region was split up into zones, with groups of three observers assigned to record birds within each zone.

Castlemaine was one of 14 teams from across country Victoria. Comparatively for 2012, we recorded a good number of birds (3296 individuals from 118 species) – and it was certainly the best result for Castlemaine for a number of years. Hopefully this reflects better rainfall and other habitat conditions since the wet period from mid-2010 to mid-2012, although the higher number of observers this year probably also helped. We were the only Country Victoria team to record Little Lorikeet, and one of only two to record Crested Bellbird.

Black tailed Native Hens on the march at Bells Swamp Photo – Noel Young

Country Victoria Teams	Number of Species	Number of Individuals
Ballarat	164	22,677
Bendigo	125	2,631
Bairnsdale	163	10,156
Castlemaine	115	3,296
Chiltern	97	745
Echuca-Tongala	89	6,214
Horsham	171	3,746
La Trobe Valley	118	6,275
Nhill	89	2,448
Portland	153	10,237
Sunraysia	140	12,156
South Gippsland (Toora)	24	1,511
Warrnambool	121	11,804
Winchelsea	127	20963
TOTAL	**277**	**114, 859**

Across the nation, there were 434 species recorded with individuals at 251,425. The Launceston team was the first Tasmanian team to ever take part and they had three species that had never been counted before as part of the Challenge Day Count - Tasmanian Native Hen, Green Rosella and Tasmanian Thornbill, taking the total number of species recorded on Challenge Count days over the years to 524.

Area	Number of Teams	# of Species	# of Individuals
Melbourne Area	5	216	71,843
Victoria Country	14	277	114,859
Queensland	6	300	46,307
New South Wales	9	254	18,980
Tasmania	1	45	236

The team from Cairns-Mossman recorded the most species with 204. The Werribee -You Yangs team clearly had the most individual birds recorded (55,410), presumably bolstered by a visit to the sewage farm.

Thanks to all those who helped out with the Castlemaine counting. It was a fun day, and also contributed to a better understanding of the health of the birds across the local area and more broadly. Below is the list of all species recorded from the greater Castlemaine area during the Challenge Count weekends in 2011 and 2012. There were a number of highlights during the 2012 count, including White-fronted Chat, Buff-banded Rail, Chestnut Teal, Painted Honeyeater and Southern Whiteface. Some of the surprising omissions (or 'dips') from the Castlemaine list were Rock Dove (which are becoming increasingly common around central Castlemaine), Black-shouldered Kite, White-eared Honeyeater and Restless Flycatcher. I'm looking forward to this December already!

Species Recorded in the greater Castlemaine area

Common name	2011	2012	Common name	2011	2012
MUSK DUCK	2	3	White-throated TREECREEPER		15
BLACK SWAN	2		BROWN TREECREEPER		26
AUSTRALIAN SHELDUCK		59	SUPERB FAIRY-WREN	56	107
AUSTRALIAN WOOD DUCK	42	179	WHITE-BROWED SCRUBWREN	3	8
GREY TEAL	24	100	WEEBILL	1	8
CHESTNUT TEAL		1	STRIATED THORNBILL	1	3
PACIFIC BLACK DUCK	54	74*	YELLOW THORNBILL	4	1
HARDHEAD	39	64	YELLOW-RUMPED THORNBILL	5	40
BLUE-BILLED DUCK		1	BUFF-RUMPED THORNBILL		13
AUSTRALASIAN GREBE	10	49	BROWN THORNBILL	2	2
HOARY-HEADED GREBE		4	SOUTHERN WHITEFACE		1
GREAT CRESTED GREBE		5	SPOTTED PARDALOTE	5	12
SPOTTED DOVE		32	STRIATED PARDALOTE	5	17*
COMMON BRONZWING	11	21	YELLOW-FACED HONEYEATER	8	22
CRESTED PIGEON	3	16	YELLOW-TUFTED HONEYEATER	1	20
PEACEFUL DOVE		3	FUSCOUS HONEYEATER	32	53
AUSTRALASIAN DARTER	1	1	WHITE-PLUMED HONEYEATER	25	36
LITTLE PIED CORMORANT	35	24	NOISY MINER		20
GREAT CORMORANT	3	26	RED WATTLEBIRD	44	47
LITTLE BLACK CORMORANT	29	8	WHITE-FRONTED CHAT		1
PIED CORMORANT	2		NEW HOLLAND HONEYEATER	7	57
AUSTRALIAN PELICAN		4	BLACK-CHINNED HONEYEATER	3	9
EASTERN GREAT EGRET	3	3	BROWN-HEADED HONEYEATER	4	2
INTERMEDIATE EGRET		3	WHITE-NAPED HONEYEATER		4
WHITE-FACED HERON	5	6	PAINTED HONEYEATER		7
AUSTRALIAN WHITE IBIS	13	17	WHITE-BROWED BABBLER		15
STRAW-NECKED IBIS	3	1	BLACK-FACED CUCKOO-SHRIKE	11	19
YELLOW-BILLED SPOONBILL		9	White-bellied CUCKOO-SHRIKE		1
BLACK-SHOULDERED KITE	2		WHITE-WINGED TRILLER		10
WHISTLING KITE		2	GOLDEN WHISTLER		3
BROWN GOSHAWK		1	RUFOUS WHISTLER	15	41
SPOTTED HARRIER	1		GREY SHRIKE-THRUSH	11	8
WEDGE-TAILED EAGLE	4	2	CRESTED BELLBIRD		3
LITTLE EAGLE	2	3	OLIVE-BACKED ORIOLE		10
NANKEEN KESTREL		1	White-browed WOODSWALLOW		6
BROWN FALCON		4	DUSKY WOODSWALLOW	4	46
PEREGRINE FALCON		2	AUSTRALIAN MAGPIE	112	298
PURPLE SWAMPHEN	11	23	GREY CURRAWONG	6	5
BUFF-BANDED RAIL		1	GREY FANTAIL	10	26
BLACK-TAILED NATIVE-HEN	18	72	WILLIE WAGTAIL	2	9
DUSKY MOORHEN	4	12*	AUSTRALIAN RAVEN	9	72
EURASIAN COOT	84	144	LITTLE RAVEN	17	17
BLACK-FRONTED DOTTEREL	1	2	MAGPIE-LARK	18	4

Common name	2011	2012	Common name	2011	2012
RED-KNEED DOTTEREL		2	WHITE-WINGED CHOUGH	24	47
MASKED LAPWING	28	23*	JACKY WINTER		2
Yellow-tailed BLACK-COCKATOO	6	6	SCARLET ROBIN		1
GALAH	41	76	EASTERN YELLOW ROBIN	3	8
LONG-BILLED CORELLA	27	109	AUSTRALIAN REED-WARBLER	1	4
SULPHUR-CRESTED COCKATOO	41	143*	RUFOUS SONGLARK	14	5
MUSK LORIKEET	41	80	SILVEREYE	7	3
LITTLE LORIKEET	3	17	WELCOME SWALLOW	51	190
PURPLE-CROWNED LORIKEET	19		FAIRY MARTIN	10	132
CRIMSON ROSELLA	18	38	TREE MARTIN		14
EASTERN ROSELLA	25	40	COMMON BLACKBIRD	45	25
RED-RUMPED PARROT	38	71	COMMON STARLING	8	20
HORSFIELD'S BRONZE-CUCKOO	5	6	COMMON MYNA	8	4
SHINING BRONZE-CUCKOO	1		MISTLETOEBIRD		9
PALLID CUCKOO		3	RED-BROWED FINCH	6	46
FAN-TAILED CUCKOO		5	DIAMOND FIRETAIL		4
LAUGHING KOOKABURRA	9	15	HOUSE SPARROW	10	29
SACRED KINGFISHER		5	AUSTRALASIAN PIPIT		4
RAINBOW BEE-EATER	1		EUROPEAN GOLDFINCH	9	3

A trip to the Inland -The Ruddall River and back (part two)

Chris Morris

[Chris continues the highlights of his trip to the north-west of Australia last year. The article began in the September issue 2012 – CN402, page 6]

Through Meekathara (a Bird) then on to Kumarina for fuel and pleasures of all pleasures - showers in the shearer's quarters at Wogarno Station.after 15km straight drive to the homestead - there's a story about that?

Mining now very much in evidence fed by huge open-cut pits, crushing plants and a wealthy looking town, Newman, servicing it all with triple length road trains. Over the Gascoyne and heading to the Pilbara on the Marble Bar road much more spinifex and termite mounds providing a lookout for Brown Hawks. On to the Fortescue river and Beadell markers showing the way on outback roads. Dreadful tracks – even the 4WD had difficulty in managing them. Glad I was not driving or expecting an owner to nurse a car through it. Still the wildflowers made up for it - Wickhams Grevillia was everywhere, likewise stands of Desert Oak, honey perfumed hakeas and thryptamene, also stackhousia snow flakes. Rabbit proof fences but no sign of rabbits – maybe they got the message from down south!

By day four at the rate of 5OO kilometres a day we were in 'Mesa' country. 'buttes' or 'jump ups' in Australian terms, and approaching the bush camp on the Rudall. Collecting firewood for the evening social and keeping the bird list going became all important and this is where the night sky was at its best.

Three day's camp on the Rudall gave us time to explore the sandy pools and the Desert Queen Baths then on to Christmas Pool named after the search party for two surveyors who perished thereabouts in 1896. Carrawine Gorge and Running Waters with its massive paperbarks saw us heading south leaving the Camel skeletons to the next drought. Somewhere in all this we fitted in dinner at the tin shed at Marble Bar, known for its record high temperatures and well worth it.

The Back Creek Siphon

George Broadway

In the early 1850's the Goldfields of Forest Creek and Sandhurst were severely afflicted by drought. The lack of water meant that gold-bearing material could not be processed, mines, puddling and panning had to cease and many miners were unemployed. Disease was rife because the only water for drinking was contaminated and filthy. Representations were made to Parliament to request the provision of a better water source for the goldfields. Much procrastination took place on the part of the politicians before it was eventually decided that the most feasible source of water was the Coliban River, having its headwaters in an area of higher and more regular rainfall.

The obstacles to achieving this scheme were considerable. First of all it required the construction of a major water storage on the Coliban. After consideration it was decided that the most suitable location was just south of Malmsbury. There was the need to dig or construct miles of channel, there were tunnels to be excavated, some through the Granodiorite rocks of Mt Alexander which required blasting. As well there was the problem of conveying the water from Malmsbury across the valley of Back Creek near Taradale so that the water could flow gradually all the way down to Castlemaine and Sandhurst.

Back Creek today looks very small, but as we gaze across its valley from the former highway near Taradale looking west to the Fryers Ridge we can see how it presented a formidable challenge to get the water from the east side to the west side.

Unfortunately the engineer in charge at the time was there because of a political appointment. He had been a railway engineer, but apparently knew little about water engineering. In 1866 a contract was let to convey over a thousand cast iron plates (which had been intended for sewerage works in Melbourne) to Taradale. In 1867 these were still lying on the ground waiting to be installed. By 1870 the siphon (or syphon in the 19C) had been installed. It was then the largest such structure in the world. The pipes were of 7.5 ft in diameter. The length was 1/3 of a mile through a valley which was 115 ft deep. The height of the intake above the lowest point was 108 ft. In December 1870 when it was filled to a depth of 60 ft, some of the plates fractured with a noise which sounded like an 8 pounder gun. A second test was carried out in January 1871 when it was filled to 92 ft, but again more plates gave way.

An expert brought from India, a Mr Sankey, reported in August that it would be too costly to make safe. He recommended a wooden flume on trestles to span the valley, or the use of wrought iron instead of cast iron. Not till 1872 did Parliament approve new pipes for 5000 pounds. Water finally flowed to Expedition Pass

Reservoir to supply Castlemaine on September 11, 1874. It was another 3 years before Malmsbury water reached Sandhurst (Bendigo), as there remained several miles of channel to be constructed. Some was tunnelled, some dug, and wooden flumes on wooden trestles used on some to span smaller gaps.

It seems that the siphon was upgraded in 1921, and more recently in 2011 a pipe of 1.3m diameter was installed inside the 1.5m diameter pipe. Some of the channel has been lined to reduce leakage, but much remains as it was excavated by pick and shovel in the 19C. We can also admire the beautiful stonework which was put into place at various places along the route.

References: Russell, Geoffrey: Water for Gold. Australian Scholarly Publishing. 2009; Google

Some archival bird records at the Castlemaine sewage ponds

Gil Smith has sent us these observations recorded in the summers of 1987/88 He has included some recent notes on Phillip Island where he now lives -

"Tues 29/1/13 ~8pm; I watched a wallaby jump into Swan Lake and swim 20-30 yards to the other side. I didn't see anything pursuing it!

Saturday 5/1/13 ~7pm I saw a little Penguin happily swimming in the *fresh water* of Swan Lake"

Species	**26/01/87**	**07/02/88**
Pacific Black Duck	50	73
Grey Teal	25	57
Chestnut Teal	1 (?)	
Pink-eared Duck	2	
Hardhead	3	2
Musk Duck	1	
Eurasian Coot	5	13
Australasian Grebe	1	19
Hoary-headed Grebe	51	66
Black Swan	1	2
Black-fronted Dotterel	3	3
Dusky Moorhen	10	13
White Ibis	20	
Straw-necked Ibis	2	
White-faced Heron	2	
Marsh Tern	1	
Masked Lapwing	3	

From the business meeting

Thank you to all members who have renewed subscriptions promptly. Please check if yours is still outstanding, and forward to the treasurer c/o the box address (back page)

The May excursion is to the area of the Back Creek Siphon. For those unaware of this historical feature, George has written an article on it for this issue (page 5)

Observations

- At the March meeting -
- Rita reported that there is still some water in Bells Swamp, though it is getting lower. There were lots of Teal, Royal and Yellow-billed Spoonbills, Native Hens, and Red-kneed and Black-fronted Dotterels
- There were discussions around the occasional sightings of Blue-faced Honeyeaters, and the the occurrence of small flocks of Indian Mynahs in Harcourt and Castlemaine
- On March 8 Dianne Thompson identified a Blue Chequered Cuckoo bee on her property. She has also noted Blue-banded bees [apparently the cuckoo bees lay their eggs in the nests of Blue-banded bees - Ed]
- Late March -
- Barbara Guerin observed a number of Yellow tailed Black Cockatoos
- Chris Morris had Scarlet Robins in the garden, and a Black Kite at Harcourt
- Chris Timewell saw two Blue-faced Honeyeaters on the Forest Ck at Wheeler st bridge
- George Broadway passed on a report of a Red-capped Robin at Guildford, a Quail in Ern Perkins' backyard, and Rainbow Lorikeets in the area.
- On Easter Sunday I counted 66 Grey Kangaroos along the Happy Valley track. About 50 were together in one paddock, with two or three breakaway groups making up the rest. No doubt I missed a few in the long grass. I make regular visits to Crusoe res. In the Bendigo State Park, where in February I found a Painted Snipe, 3 Freckled Duck, Nankeen Night Heron, a nesting Great Crested Grebe, among other more common birds. More recently, there were numbers of Little Black Cormorants working over the open water by diving simultaneously in close formation. An interesting spot to keep an eye on - Noel Young

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club

Castlemaine Field Naturalists Programme
April 2013

Fri April 12 meeting: speaker STEVE WILLIAMS -
"Moth Biology of the Box Ironbark Forests"

Sat April 13 field trip: The Back Creek Siphon

Fri May 10 meeting: speaker MAT SHEEHAN

VISITORS ARE WELCOME AT CLUB ACTIVITIES

General meetings - (second Friday of each month, except January) are held in the Uniting Church (UCA) Hall (enter from Lyttleton St.) at 7.30 pm.
Field Trips - (Saturday following the general meeting) leave from the car park opposite Castle Motel, Duke Street at 1.30pm sharp unless stated otherwise. BYO morning and/or afternoon tea. Outdoor excursions are likely to be cancelled in extreme weather conditions. There are NO excursions on total fire ban days.
Business meetings - fourth Thursday of each month, except December, at George Broadways; 24a Greenhill Ave., at 7.30 pm. Members are invited to attend.

Subscriptions for 2013
Ordinary membership: Single $30, Family $40
Pensioner or student: Single $25, Family $30
Subscription includes postage of the monthly newsletter, Castlemaine Naturalist

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